WHAT IS CLAIMED IS:

1. A liquid crystal display apparatus, comprising:

a liquid crystal cell;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers, provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light;

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, which has a retardation in a perpendicular direction, and optically compensates said liquid crystal cell; and

a compensation layer provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer,

wherein said compensation layer has a retardation in a perpendicular direction whose sign is reverse to a sum of the retardations in the perpendicular direction from said polarizer to said quarter wavelength layer, but excluding said compensation layer.

2. A liquid crystal display apparatus as set forth in Claim 1, further comprising:

a polarizer compensation layer, provided at least between said quarter wavelength layer and the polarizer on the side of said phase difference layer, having respective retardations in perpendicular and in-plane directions, the retardation in the in-plane direction optically compensating said polarizer.

3. The liquid crystal display apparatus as set forth in Claim 1, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

4. The liquid crystal display apparatus as set forth in Claim 1, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so

as to satisfy nx1 = ny1.

5. The liquid crystal display apparatus as set forth in Claim 1, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

6. The liquid crystal display apparatus as set forth in Claim 1, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of the sign.

7. A liquid crystal display apparatus, comprising:

a liquid crystal cell in a vertical alignment mode;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said

respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light;

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, which has main refraction index in a normal direction nz1 that is smaller than main refraction indexes in in-plane directions nx1 and ny1; and

a compensation layer, provided at least between said the polarizer and quarter wavelength layer on the side of said phase difference layer, having main refraction index in a normal direction nz2 that is greater than main refraction indexes in in-plane directions nx2 and ny2.

8. The liquid crystal display apparatus as set forth in Claim 7, wherein the respective main refraction indexes of said compensation layers satisfy $nx2 = ny2 < nz2$.

9. A liquid crystal display apparatus as set forth in Claim 7, further comprising:

a polarizer compensation layer provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer,

wherein said polarizer compensation layer satisfies nx3 > ny3, where main refraction indexes in in-plane directions are nx3 and ny3, while main refraction index in a perpendicular direction is nz3, and an ny3 axis is parallel to an absorption axis of said polarizer on the same side with respect to The liquid crystal cell.

10. The liquid crystal display apparatus as set forth in Claim 7, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

11. The liquid crystal display apparatus as set

forth in Claim 7, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

12. The liquid crystal display apparatus as set forth in Claim 7, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

13. The liquid crystal display apparatus as set forth in Claim 7, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

14. A liquid crystal display apparatus operating in a horizontal alignment mode, comprising:

a liquid crystal cell including liquid crystals of positive dielectric anisotropy;

polarizers provided on both sides of said liquid

crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction substantially set at a quarter wavelength of a wavelength of transmitted light;

a positive uniaxial phase difference layer provided between at least one of said quarter wavelength layers and said liquid crystal cell;

a negative uniaxial phase difference layer provided between at least one of said quarter wavelength layers and said liquid crystal cell; and

a compensation layer, provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer, having main refraction index in a normal direction nz2 that is greater than main refraction indexes in in-plane directions nx2 and ny2.

15. The liquid crystal display apparatus as set forth in Claim 14, wherein the respective main refraction indexes of said compensation layers satisfy nx2 = ny2 < nz2.

16. A liquid crystal display apparatus as set forth in Claim 14, further comprising:

a polarizer compensation layer provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer,

wherein said polarizer compensation layer satisfies nx3 > ny3, where main refraction indexes in in-plane directions are nx3 and ny3, while main refraction index in a perpendicular direction is nz3, and an ny3 axis is parallel to an absorption axis of said polarizer on the same side with respect to The liquid crystal cell.

17. The liquid crystal display apparatus as set forth in Claim 14, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

18. The liquid crystal display apparatus as set forth in Claim 14, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

19. The liquid crystal display apparatus as set forth in Claim 14, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

20. The liquid crystal display apparatus as set forth in Claim 14, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

21. A liquid crystal display apparatus operating in a horizontal alignment mode, comprising:

a liquid crystal cell including liquid crystals of positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction substantially set at a quarter wavelength of a wavelength of transmitted light;

an inclined phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, in which an original refraction index ellipsoid satisfies na = nb > nc, and an na axis is identical to a direction orthogonal to a rubbing direction in an in-plane, while an nc axis is inclined to make a predetermined angle with respect to a normal direction; and

a compensation layer, provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer, having main refraction index in a normal direction nz2 that is greater than main refraction indexes in in-plane directions nx2 and ny2.

22. The liquid crystal display apparatus as set forth in Claim 21, wherein the respective main

refraction indexes of said compensation layers satisfy nx2 = ny2 < nz2.

23. A liquid crystal display apparatus as set forth in Claim 21, further comprising:

a polarizer compensation layer provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer,

wherein said polarizer compensation layer satisfies nx3 > ny3, where main refraction indexes in in-plane directions are nx3 and ny3, while main refraction index in a perpendicular direction is nz3, and an ny3 axis is parallel to an absorption axis of said polarizer on the same side with respect to The liquid crystal cell.

24. The liquid crystal display apparatus as set forth in Claim 21, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions

different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

25. The liquid crystal display apparatus as set forth in Claim 21, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

26. The liquid crystal display apparatus as set forth in Claim 21, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

27. The liquid crystal display apparatus as set forth in Claim 21, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

28. A liquid crystal display apparatus operating in an optically compensated bend mode, comprising:

a liquid crystal cell having liquid crystals of a positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light;

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, having a main refraction index in an in-plane direction nx1 > a main refraction index in an in-plane direction ny1 > a main refraction index in a normal direction nz1; and

a compensation layer, provided at least between said the polarizer and quarter wavelength layer on the side of said phase difference layer, having main refraction index in a normal direction nz2 that is greater than main refraction indexes in in-plane directions nx2 and ny2.

29. The liquid crystal display apparatus as set forth in Claim 28, wherein the respective main refraction indexes of said compensation layers satisfy nx2 = ny2 < nz2.

30. A liquid crystal display apparatus as set forth in Claim 28, further comprising:

a polarizer compensation layer provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer,

wherein said polarizer compensation layer satisfies nx3 > ny3, where main refraction indexes in in-plane directions are nx3 and ny3, while main refraction index in a perpendicular direction is nz3, and an ny3 axis is parallel to an absorption axis of said polarizer on the same side with respect to The liquid crystal cell.

31. The liquid crystal display apparatus as set forth in Claim 28, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

32. The liquid crystal display apparatus as set forth in Claim 28, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

33. The liquid crystal display apparatus as set forth in Claim 28, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

34. The liquid crystal display apparatus as set forth in Claim 28, wherein both said quarter wavelength layers have the retardation in the perpendicular

direction identical with each other in terms of a sign.

35. A liquid crystal display apparatus operating in an optically compensated bend mode, comprising:

a liquid crystal cell having liquid crystals of a positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light;

an inclined phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, in which an original refraction index ellipsoid satisfies na = nb > nc, and an na axis is identical to a direction orthogonal to a rubbing direction in an in-plane, while an nc axis is inclined to make a predetermined angle with respect to a normal direction; and

a compensation layer, provided at least between said the polarizer and quarter wavelength layer on the side of said phase difference layer, having main

refraction index in a normal direction nz2 that is greater than main refraction indexes in in-plane directions nx2 and ny2.

36. The liquid crystal display apparatus as set forth in Claim 35, wherein the respective main refraction indexes of said compensation layers satisfy nx2 = ny2 < nz2.

37. A liquid crystal display apparatus as set forth in Claim 35, further comprising:

a polarizer compensation layer provided at least between the polarizer and said quarter wavelength layer on the side of said phase difference layer,

wherein said polarizer compensation layer satisfies nx3 > ny3, where main refraction indexes in in-plane directions are nx3 and ny3, while main refraction index in a perpendicular direction is nz3, and an ny3 axis is parallel to an absorption axis of said polarizer on the same side with respect to The liquid crystal cell.

38. The liquid crystal display apparatus as set forth in Claim 35, wherein:

said liquid crystal cell includes a first

substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

39. The liquid crystal display apparatus as set forth in Claim 35, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

40. The liquid crystal display apparatus as set forth in Claim 35, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

41. The liquid crystal display apparatus as set forth in Claim 35, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

42. A liquid crystal display apparatus, comprising:

a liquid crystal cell;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light; and

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, which has a retardation in a perpendicular direction, and optically compensates said liquid crystal cell,

wherein said quarter wavelength layers have nz4 substantially equal to (nx4 + ny4)/2, where main refraction indexes in in-plane directions are nx4 and ny4, while a main refraction index in a normal

direction is nz4.

43. The liquid crystal display apparatus as set forth in Claim 42, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

44. The liquid crystal display apparatus as set forth in Claim 42, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

45. The liquid crystal display apparatus as set forth in Claim 42, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The

liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

46. The liquid crystal display apparatus as set forth in Claim 42, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

47. A liquid crystal display apparatus, comprising:

a liquid crystal cell in a vertical alignment mode;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light; and

a phase difference layer, provided between at

least one of said quarter wavelength layers and said liquid crystal cell, which has main refraction index in a normal direction nz1 that is smaller than main refraction indexes in in-plane directions nx1 and ny1,

wherein said quarter wavelength layers have nz4 substantially equal to (nx4 + ny4)/2, where main refraction indexes in in-plane directions are nx4 and ny4, while a main refraction index in a normal direction is nz4.

48. The liquid crystal display apparatus as set forth in Claim 47, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

49. The liquid crystal display apparatus as set forth in Claim 47, wherein said phase difference layer

has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

50. The liquid crystal display apparatus as set forth in Claim 47, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

51. The liquid crystal display apparatus as set forth in Claim 47, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

52. A liquid crystal display apparatus operating in a horizontal alignment mode, comprising:

a liquid crystal cell including liquid crystals of positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction substantially set at a quarter wavelength of a wavelength of transmitted light;

a positive uniaxial phase difference layer provided between at least one of said quarter wavelength layers and said liquid crystal cell; and

a negative uniaxial phase difference layer provided between at least one of said quarter wavelength layers and said liquid crystal cell,

wherein said quarter wavelength layers have nz4 substantially equal to (nx4 + ny4)/2, where main refraction indexes in in-plane directions are nx4 and ny4, while a main refraction index in a normal direction is nz4.

53. The liquid crystal display apparatus as set forth in Claim 52, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

54. The liquid crystal display apparatus as set forth in Claim 52, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

55. The liquid crystal display apparatus as set forth in Claim 52, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

56. The liquid crystal display apparatus as set forth in Claim 52, wherein both said quarter wavelength layers have the retardation in the perpendicular

direction identical with each other in terms of a sign.

57. A liquid crystal display apparatus operating in a horizontal alignment mode, comprising:

a liquid crystal cell including liquid crystals of positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction substantially set at a quarter wavelength of a wavelength of transmitted light; and

an inclined phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, in which an original refraction index ellipsoid satisfies na = nb > nc, and an na axis is identical to a direction orthogonal to a rubbing direction in an in-plane, while an nc axis is inclined to make a predetermined angle with respect to a normal direction,

wherein said quarter wavelength layers have nz4 substantially equal to (nx4 + ny4)/2, where main refraction indexes in in-plane directions are nx4 and

ny4, while a main refraction index in a normal direction is nz4.

58. The liquid crystal display apparatus as set forth in Claim 57, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

59. The liquid crystal display apparatus as set forth in Claim 57, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

60. The liquid crystal display apparatus as set forth in Claim 57, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The

liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

61. The liquid crystal display apparatus as set forth in Claim 57, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

62. A liquid crystal display apparatus operating in an optically compensated bend mode, comprising:

a liquid crystal cell having liquid crystals of a positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light; and

a phase difference layer, provided between at

least one of said quarter wavelength layers and said liquid crystal cell, having main refraction indexes in an in-plane direction nx1 > main refraction index in an in-plane direction ny1 > main refraction index in a normal direction nz1,

wherein said quarter wavelength layers have nz4 substantially equal to (nx4 + ny4)/2, where main refraction indexes in in-plane directions are nx4 and ny4, while a main refraction index in a normal direction is nz4.

63. The liquid crystal display apparatus as set forth in Claim 62, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

64. The liquid crystal display apparatus as set

forth in Claim 62, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

65. The liquid crystal display apparatus as set forth in Claim 62, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

66. The liquid crystal display apparatus as set forth in Claim 62, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

67. A liquid crystal display apparatus operating in an optically compensated bend mode, comprising:

a liquid crystal cell having liquid crystals of a positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid

crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light; and

an inclined phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, in which an original refraction index ellipsoid satisfies na = nb > nc, and an na axis is identical to a direction orthogonal to a rubbing direction in an in-plane, while an nc axis is inclined to make a predetermined angle with respect to a normal direction,

wherein said quarter wavelength layers have nz4 substantially equal to (nx4 + ny4)/2, where main refraction indexes in in-plane directions are nx4 and ny4, while a main refraction index in a normal direction is nz4.

68. The liquid crystal display apparatus as set forth in Claim 67, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to

a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

69. The liquid crystal display apparatus as set forth in Claim 67, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

70. The liquid crystal display apparatus as set forth in Claim 67, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

71. The liquid crystal display apparatus as set forth in Claim 67, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

72. A liquid crystal display apparatus, comprising:

a liquid crystal cell;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a wavelength of transmitted light; and

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, which has a retardation in a perpendicular direction, and optically compensates said liquid crystal cell,

wherein set at less than one eighth of the wavelength of the transmitted light is each absolute value of a retardation in a perpendicular direction from said polarizer to said quarter wavelength layer.

73. The liquid crystal display apparatus as set forth in Claim 72, wherein set substantially at zero is each of the absolute values of the retardation in the perpendicular direction in the range.

74. The liquid crystal display apparatus as set forth in Claim 72, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

75. The liquid crystal display apparatus as set forth in Claim 72, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

76. The liquid crystal display apparatus as set forth in Claim 72, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

77. The liquid crystal display apparatus as set forth in Claim 72, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

78. A liquid crystal display apparatus, comprising:

a liquid crystal cell in a vertical alignment mode;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is substantially set at a quarter wavelength of a

wavelength of transmitted light; and

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, having main refraction index in a normal direction nz1 that is smaller than main refraction indexes of in-plane directions nx1 and ny1,

wherein set at less than one eighth of the wavelength of the transmitted light is each absolute value of a retardation in a perpendicular direction from said polarizer to said quarter wavelength layer.

79. The liquid crystal display apparatus as set forth in Claim 78, wherein set substantially at zero is each of the absolute values of the retardation in the perpendicular direction in the range.

80. The liquid crystal display apparatus as set forth in Claim 78, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions

different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

81. The liquid crystal display apparatus as set forth in Claim 78, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

82. The liquid crystal display apparatus as set forth in Claim 78, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

83. The liquid crystal display apparatus as set forth in Claim 78, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

84. A liquid crystal display apparatus operating in a horizontal alignment mode, comprising:

a liquid crystal cell including liquid crystals of positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction set substantially at a quarter wavelength of a wavelength of transmitted light;

a positive uniaxial phase difference layer provided between at least one of said quarter wavelength layers and said liquid crystal cell; and

a negative uniaxial phase difference layer provided between at least one of said quarter wavelength layers and said liquid crystal cell,

wherein set at less than one eighth of the wavelength of the transmitted light is each absolute value of a retardation in a perpendicular direction from said polarizer to said quarter wavelength layer.

85. The liquid crystal display apparatus as set forth in Claim 84, wherein set substantially at zero is

each of the absolute values of the retardation in the perpendicular direction in the range.

86. The liquid crystal display apparatus as set forth in Claim 84, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

87. The liquid crystal display apparatus as set forth in Claim 84, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

88. The liquid crystal display apparatus as set forth in Claim 84, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The

liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

89. The liquid crystal display apparatus as set forth in Claim 84, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

90. A liquid crystal display apparatus operating in a horizontal alignment mode, comprising:

a liquid crystal cell including liquid crystals of positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction set substantially at a quarter wavelength of a wavelength of transmitted light; and

an inclined phase difference layer, provided

between at least one of said quarter wavelength layers and said liquid crystal cell, in which an original refraction index ellipsoid satisfies na = nb > nc, and an na axis is identical to a direction orthogonal to a rubbing direction in an in-plane, while an nc axis is inclined to make a predetermined angle with respect to a normal direction,

wherein set at less than one eighth of the wavelength of the transmitted light is each absolute value of a retardation in a perpendicular direction from said polarizer to said quarter wavelength layer.

91. The liquid crystal display apparatus as set forth in Claim 90, wherein set substantially at zero is each of the absolute values of the retardation in the perpendicular direction in the range.

92. The liquid crystal display apparatus as set forth in Claim 90, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that

liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

93. The liquid crystal display apparatus as set forth in Claim 90, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

94. The liquid crystal display apparatus as set forth in Claim 90, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

95. The liquid crystal display apparatus as set forth in Claim 90, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

96. A liquid crystal display apparatus operating in an optically compensated bend mode, comprising:

a liquid crystal cell having liquid crystals of a positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is set substantially at a quarter wavelength of a wavelength of transmitted light; and

a phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, having main refraction indexes in an in-plane direction nx1 > main refraction index in an in-plane direction ny1 > main refraction index in a normal direction nz1,

wherein set at less than one eighth of the wavelength of the transmitted light is each absolute value of a retardation in a perpendicular direction from said polarizer to said quarter wavelength layer.

97. The liquid crystal display apparatus as set forth in Claim 96, wherein set substantially at zero is each of the absolute values of the retardation in the perpendicular direction in the range.

98. The liquid crystal display apparatus as set forth in Claim 96, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

99. The liquid crystal display apparatus as set forth in Claim 96, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

100. The liquid crystal display apparatus as set forth in Claim 96, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

101. The liquid crystal display apparatus as set forth in Claim 96, wherein both said quarter wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.

102. A liquid crystal display apparatus operating in an optically compensated bend mode, comprising:

a liquid crystal cell having liquid crystals of a positive dielectric constant anisotropy;

polarizers provided on both sides of said liquid crystal cell;

quarter wavelength layers provided between said respective polarizers and said liquid crystal cell, each of said quarter wavelength layers having a retardation in an in-plane direction that is set substantially at a quarter wavelength of a wavelength

of transmitted light; and

an inclined phase difference layer, provided between at least one of said quarter wavelength layers and said liquid crystal cell, in which an original refraction index ellipsoid satisfies na = nb > nc, and an na axis is identical to a direction orthogonal to a rubbing direction in an in-plane, while an nc axis is inclined to make a predetermined angle with respect to a normal direction,

wherein set at less than one eighth of the wavelength of the transmitted light is each absolute value of a retardation in a perpendicular direction from said polarizer to said quarter wavelength layer.

103. The liquid crystal display apparatus as set forth in Claim 102, wherein set substantially at zero is each of the absolute values of the retardation in the perpendicular direction in the range.

104. The liquid crystal display apparatus as set forth in Claim 102, wherein:

said liquid crystal cell includes a first substrate having a pixel electrode that corresponds to a pixel, a second substrate having an opposite electrode, and a liquid crystal layer that is provided

between said first and second substrates; and

said liquid crystal layer is controlled so that liquid crystal molecules have alignment directions different from each other in the pixel, at least when a voltage between said pixel electrode and said opposite electrode is a predetermined voltage.

105. The liquid crystal display apparatus as set forth in Claim 102, wherein said phase difference layer has respective main refraction indexes nx1 and ny1 so as to satisfy nx1 = ny1.

106. The liquid crystal display apparatus as set forth in Claim 102, wherein:

said phase difference layers are provided between said respective quarter wavelength layers and The liquid crystal cell, have different main refraction indexes nx1 and ny1, respectively; and

said nx1 axes of said phase difference layers cross each other at a right angle, while said ny1 axes of said phase difference layers cross each other at a right angle.

107. The liquid crystal display apparatus as set forth in Claim 102, wherein both said quarter

wavelength layers have the retardation in the perpendicular direction identical with each other in terms of a sign.